# LITEBOX®

## *Operating Instructions*

STREAMLIGHT®

OPERATING INSTRUCTIONS FOR STREAMLIGHT LITEBOX®

Thank you for selecting the Streamlight LiteBox,® a truly remarkable portable light. As with any fine instrument, reasonable care and maintenance of this product will provide years of dependable service. Please read this manual before using your Streamlight. It includes important safety and operating instructions and should be saved. **Charge the LiteBox overnight before first use.**

The LiteBox is available in three basic systems, each available in regular and dual lamp versions: the Standard model, the Vehicle model and the Power Failure model. All come with convenient recharging racks that do not require LiteBox disassembly for charging. The battery is rated at a nominal 10 ampere-hours and is capable of being recharged up to 500 times and will power the lamp options for various run times described in Table 2.

The Standard and Vehicle systems use the same basic lantern with different charging racks. For Standard use, the LiteBox comes complete with both AC 120 volt and DC 12 volt cigarette lighter power cords and Standard type charge racks, which will accept these cords. The Vehicle model version comes complete with a truck mountable hardware rack, and an 8 watt spot lamp standard. The Power Failure lantern itself differs electronically from the other model, but uses the same charge rack as the Standard model. Both AC and DC cords are included, but only the AC works in the power failure mode. The power failure feature of this unit provides emerging lighting automatically when the power fails. It is one of the few units available anywhere that gives you total portability in an emergency type light.

**SAFETY**

A. BEFORE USING YOUR LITEBOX AND CHARGER, READ ALL INSTRUCTIONS IN THIS MANUAL AND ALL CAUTIONARY MARKINGS ON THE CHARGER.

B. **CAUTION:** To reduce the risk of fire, electrical shock, or personal injury, DO NOT attempt to recharge the LiteBox with any other chargers than those supplied by Streamlight. Likewise, do not attempt to charge any other product with Streamlight chargers.

C. **WARNING:** Never leave your LiteBox with its lamp face against any surface including skin while in operation. The resultant heat build-up can cause a fire or burns.

D. Careful observation of the lantern LED's serves as an important warning of possible charge circuit malfunction which may cause battery overcharging. The green LED should turn "on" steadily and the red LED should turn "off" completely within 24 hours of charging time. If the red LED stays "on" past this time, remove the light from service and return it immediately to the Streamlight factory at 1030 W. Germantown Pike, Norristown, PA 19403 for free evaluation and repair. In extremely rare circumstances, an overcharged battery may release a flammable hydrogen gas mixture. In the unlikely event that this mixture should ignite, bodily injury could result.

E. The LiteBox should not be switched on and off during charging unless only the green LED is lighted.

F. Remove the LiteBox from the charger holder (rack) before attempting any cleaning or routine maintenance. Do not try to repair the lantern or charger yourself. Take it to a qualified repair facility or return it to the Streamlight factory.

G. Recycle the battery responsibly when no longer serviceable. DO NOT INCINERATE THE BATTERY EVEN IF IT IS SEVERELY DAMAGED OR COMPLETELY WORN OUT. The battery can explode in a fire. Recycle properly.

H. Handle the battery carefully and never allow it to short circuit. A shorted battery can deliver hundreds of amperes of current which can easily start a fire.

**CHARGING AND OPERATION**

To release the light from the rack, push the black bar down, slide the light forward and lift up. The LiteBox will only fit one (1) way into the rack.

The on / off switch is on the left side of the handle, covered with a black rubber boot. A pair of charging indicators are on the opposite side underneath the information label. The red LED means that the light is charging. The green LED means it is fully charged and ready for use.
It is important to understand that a battery can take from only minutes to a maximum of 24 hours to fully charge depending on the battery's residual charge and other factors. When fully charged, the red LED should turn "off" completely and the green LED should turn "on" steadily.

Charge your LiteBox overnight before first use. Charging will occur only when the lamp is “off.” While the lead-acid batteries supplied with the LiteBox have been specifically selected to tolerate deep discharges, the battery should be charged as soon as possible after use to ensure maximum service life. The batteries should never be "exercised" in an attempt to erase "memory" which never occurs with lead-acid batteries.

The Power Failure lantern is intended to be used with an AC transformer. If you wish to mount the lantern in a vehicle and charge it with DC power, it should be wired so that charge power is always available. If connected through the ignition switch, the lantern may turn on when the ignition is switched “off.” The power failure function will work properly only with an AC source.

## CHARGE RACKS

### Mounting

The charging racks supplied with the LiteBox are meant for permanent installation, depending on the model, either indoors or in a vehicle. All three models can be charged without racks.

The Standard and Power Failure models include cigarette lighter adapter for temporary non-rack charging in most vehicles.

Four (4) self-tapping 1 1/4" #8 screws are included with each rack and should be sufficient for most mounting situations. Should your mounting situation require heavier hardware, use #8 machine screws. The recommended mounting positions are from vertical to horizontal, but with the lamp end facing up. Allow enough extra space above the rack for removing and replacing the LiteBox.

## VEHICLE MOUNTED, DIRECT WIRE CHARGE RACK

**IMPORTANT:**

1. Never attempt to directly wire any LiteBox charge rack to a 120 volt AC power source. It is intended for 12-15 volts DC only.

2. Before making electrical connections in a vehicle, keep in mind that a shorted battery can deliver hundreds of amperes, which can easily start a fire. Make all connections with insulated solder joints, lugs, or other devices intended for such use. Be sure that your installation is fused. If you install a separate fuse for your LiteBoxes, 2 amps per unit are recommended.

Before installation, determine if your hookup is to be switched or non-switched. (Please read *Power Requirements* near the end of this manual).

The LiteBox is protected from reverse polarity. If connected backwards, the unit simply will not charge.

The positive lead from the charge rack is solid red or has a red stripe. The negative lead is solid black or has a black stripe.

## LAMP REPLACEMENT

**CAUTION:** The inner halogen bulb operates at a high temperature and is pressurized. Allow to cool before handling. We recommend wearing safety glasses when replacing the lamp.

Two styles of PAR-36 lamps are used in the LiteBox: a one-piece sealed beam with a glass reflector and a lamp assembly having a replaceable bi-pin halogen bulb.

To remove either style lamp, stand the LiteBox on its back end and pry the black rubber ring from the lamp housing. Lift out the lamp and carefully remove the slip-on terminals.

If the new lamp is a sealed beam, reconnect the terminals (no need to observe polarity) and replace the lamp on the housing. Try to dress the lamp wires away from each other and make sure the key on the reflector fits into its recess in the housing. Replace the rubber ring.

To replace the halogen bi-pin bulb in the metal reflector assembly, unscrew the bulb socket from the reflector and pull the old bulb straight out from the socket. Align the pins of the new bulb with the holes in the socket and push until the glass is seated against the socket. **NOTE:** Avoid touching the new bulb with your skin as perspiration oil can "smoke" the inside of the lens and reflector, as well as deteriorate the bulb glass. Reconnect the socket wires; there is no polarity. At this point, if you have the clear "spot" lens, turn on the lantern and adjust the focus by screwing the socket in or out of the reflector while observing the "spot" against a wall about ten feet away. The adjustment range is from fully seated to the point where the socket "O" Ring starts to leave the surrounding screw shell. The "flood" lens need not be focused. Replace the lamp assembly in the lamp housing, trying to dress the wires away from each other as much as possible. There is no key to align, but the flood assembly should be rotated to obtain a desirable pattern angle. Replace the rubber ring.

## BATTERY REPLACEMENT

Read *Safety* before replacing battery. The battery compartment is accessible at the bottom of the unit by removing the six (6) base screws. Remove the base of the lantern and the gasket. Disconnect the old battery, taking care not to stress the wiring harness or battery tabs. Slowly pull the battery out and remove the foam pad. Inspect the wiring, making sure that the wires run in their proper channels and are not pinched. This is to prevent shorting the battery, which may cause a fire. Insert the foam spacer and place the new battery into the upper half of the lantern with the terminals toward the switch side and the positive (red) terminal nearest to the circuit board. Connect the red wire to the positive (+) tab of the battery and the black wire to the negative (-) tab. Reversing these connections will damage the LiteBox. Replace the gasket and cover using moderate torque on the six (6) base screws.

**NOTE:** The sealed lead acid battery in this product is recyclable. At the end of its useful life, under various country and state laws, it may be illegal to dispose of this battery in the municipal solid waste stream. Check with your local solid waste officials for details in your area for recycling options or proper disposal.

## POWER REQUIREMENT OF VEHICLE MOUNTED SYSTEMS

This section describes the load which a LiteBox puts on a vehicle electrical system and suggests ways to deal with the situation.

After a complete discharge, charging a single LiteBox will consume 14 ampere-hours (Ah) from a 12 volt DC source in the first 24 hours, and one Ah each 24 hours thereafter. If the vehicle stands unused, without supplemental battery charging, the LiteBox will remove the above capacity directly form the vehicle battery if it is left connected at all times and would eventually drain the battery fully.

The typical car battery is 50 to 70 Ah, while a truck battery may be over 100 Ah. In cold weather, even a 15% loss of vehicle battery capacity could cause hard starting.

We recommend you take one of the following actions to keep your vehicle and LiteBox working well together:

1. Use the vehicle daily which keeps the vehicle battery charged and, in turn, the LiteBox.

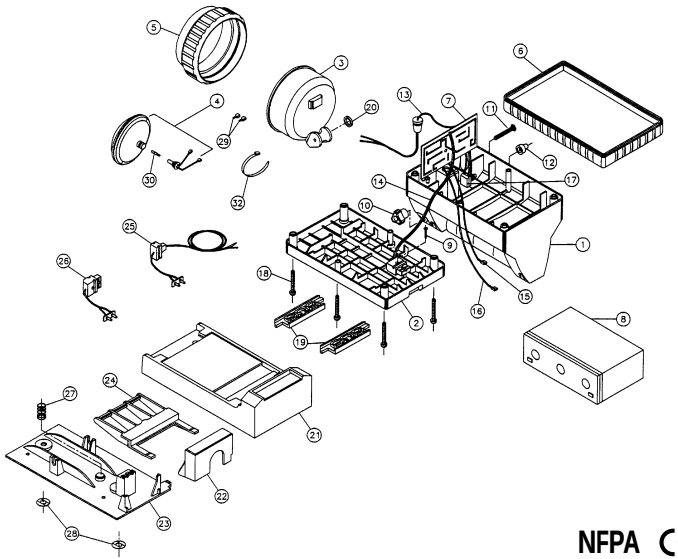
2. Wire the LiteBox to the switched side of the ignition. The drawback to this is that while the vehicle battery does not get drained during periods of inactivity, the LiteBox might never receive a full charge.

3. The best solution is to equip the vehicle with a supplemental trickle charger which is connected to AC power when the vehicle is standing. The advantages to this setup are that your vehicle battery will always be topped up, other power accessories can be added to the electrical system, and you may obtain longer vehicle battery life. Such chargers are available from several manufacturers. Your fire equipment distributor should be able to help.

## Replacement Parts

| Item | Quantity | Part No. | Description |
|---|---|---|---|
| 1 | 1 | 45904 | Top Assembly, LiteBox, Standard, Orange |
| | | 45924 | Top Assembly, LiteBox, Standard, Yellow |
| | | 45905 | Top Assembly, LiteBox, PF, Orange |
| | | 45906 | Top Assembly, LiteBox, PF, Beige |
| | | 45925 | Top Assembly, LiteBox, PF, Yellow |
| | | 45926 | Top Assembly, LiteBox, D.F., Orange |
| | | 45927 | Top Assembly, LiteBox, D.F., Yellow |
| 2 | 1 | 450006 | Bottom, LiteBox, Orange |
| | | 450006-1 | Bottom, LiteBox, Beige |
| | | 450006-2 | Bottom, LiteBox, Yellow |
| 3 | 1 | 450102 | Swivel Head Assembly, Orange |
| | | 450103 | Swivel Head Assembly, Beige |
| | | 450106 | Swivel Head Assembly, Yellow |
| 4 | 1 | 45911 | Lamp Assembly 8WS |
| | | 45908 | Lamp Assembly 8WF |
| | | 45910 | Lamp Assembly 20WF |
| | | 45913 | Lamp Assembly 20WS |
| | | 45915 | Lamp Assembly 8W Dual Filament |
| 5 | 1 | 45918 | Lamp Ring |
| 6 | 1 | 45907 | Gasket |
| 7 | 1 | 450165 | Kit, PCB Assembly STD w/Wires |
| | | 450166 | Kit, PCB Assembly PF w/Wires |
| | | 450160 | Kit, PCB Assembly D.F. Lamp w/Wires |
| 8 | 1 | 45937 | Battery |
| 9 | 1 | 450019 | Screw, Charge Contact |
| 10, 11 | 1 | 45916 | Knob & Bolt, Swivel Head |
| 12 | 1 | 400130-1 | Switch Boot |
| 13* | 1 | 450053 | Harness, 2 Wire Lamp |
| | | 450054 | Harness, 3 Wire Lamp |
| 14 | 1 | 450028 | Harness, Lantern Charge |
| 15 | 1 | 450033 | Wire, Battery Positive |
| 16 | 1 | 450034 | Wire, Battery Negative |
| 17 | 1 | 400157-1 | Switch |
| 18 | 6 | 450018 | Screw, Lantern Body |
| 19 | 2 | 450017 | Foot, Lantern |
| 20 | 1 | 400172 | "O" Ring, Swivel Head |
| 21 | 1 | 450011 | Top, Charge Rack, Orange |
| | | 450011-1 | Top, Charge Rack, Beige |
| | | 450011-2 | Top, Charge Rack, Yellow |
| 22 | 1 | 450020 | Release Button |
| 23 | 1 | 450012 | Bottom, Charge Rack, Orange |
| | | 450012-1 | Bottom, Charge Rack, Beige |
| | | 450012-2 | Bottom, Charge Rack, Yellow |
| 24 | 1 | 450021 | Latch, Rack |
| 25 | 1 | 450031 | Harness, Direct Wire |
| 26 | 1 | 450029 | Harness, Standard Rack |
| 27 | 1 | 450022 | Spring, Latch Release |
| 28 | 2 | 400103 | Rack, Snap Retainer |
| 29* | 2 or 3 | 450055 | Lamp Terminal |
| 30 | 1 | 45901 | Bulb, 8W Bi-Pin |
| | | 45903 | Bulb, 8W Bi-Pin (300 Hour) |
| | | 45902 | Bulb, 20W Bi-Pin |
| | | 45921 | Bulb, 8W Dual Filament |
| 31 | 1 | 450014 | Swivel Only, Black (Not Shown) |
| 32 | 1 | 450073 | Cable Tie, Lamp Harness |

*Quantity required depends if parts are needed for a single or dual lamp system.



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• The sealed lead acid battery in this product is recyclable. At the end of its useful life, under various state laws, it may be illegal to dispose of this battery in the municipal solid waste stream. Check with your local solid waste officials for details in your area for recycling options or proper disposal.

Table 1

| Lamp Option | Part No. | Maximum Peak Beam Candlepower |
|---|---|---|
| 8 Watt Spot | 45911 | 50,000 |
| 20 Watt Spot | 45913 | 70,000 |
| 8 Watt Flood | 45908 | 550 |
| 20 Watt Flood | 45910 | 1,400 |
| Dual Filament Lamp: | | |
| 8 Watt Spot | 45920 | 45,000 |
| Bi-Pin Replacement Bulb: | | |
| 8 Watt | 45901 | |
| 20 Watt | 45902 | |

Table 2

| Battery | Run Time Hours (Nominal) | | Charge Time Hours (Nominal) | | Average Weight Lbs. | Charge Cycle (approx.) |
|---|---|---|---|---|---|---|
| | 8W | 20W | AC | DC | | |
| 10 Ah | 8.39 | 3.44 | 17.75 | 11.0 | 6.3 | 300-500 |

*MANUFACTURER*
**Streamlight, Inc.**
30 Eagleville Road / Eagleville, PA USA 19403-3996
(610) 631-0600 / (800) 523-7488 / Fax (610) 631-0712 / Fax (800) 220-7007 / **www.streamlight.com**

**IMPORTANT** – Be sure to use genuine **Streamlight** replacement parts.

**WARRANTY REGISTRATION:** To register the warranty on your Streamlight, complete the card enclosed and mail to Streamlight, Inc., within ten (10) days of purchase. When returning product for warranty repairs, please provide receipt or other proof of purchase.

**PRODUCT USE:** The Streamlights are intended for use as high intensity, heavy duty, rechargeable, portable light sources. Use of the Streamlights for any purpose other than light sources is specifically discouraged by the manufacturer.

The rechargeable battery contained in this product is recyclable. At the end of its useful life, under various country and state laws, it may be illegal to dispose of this battery in the municipal solid waste stream. Check with your local solid waste officials for details in your area for recycling options or proper disposal.

**WARRANTY Streamlight LiteBox™**

Streamlight makes no express warranties other than those expressly provided herein. Streamlight does not make, and hereby expressly disclaims, any implied warranties, including warranties of merchantability or fitness for a particular purpose, except to the extent that implied warranties may not be disclaimed under applicable law. To the extent any such implied warranties may not be disclaimed under applicable law, the duration of such implied warranties shall be limited to the minimum period required by applicable law. Streamlight's responsibility under all warranties, both expressed and implied, shall be limited to the repair, replacement or refund of the purchase price of any products covered by such warranty. Streamlight shall, in no event, be liable for any other damages, including consequential or incidental damages. Some jurisdictions my not allow the waiver of or limitations on the scope or duration of implied or expressed warranties or on the exclusion of consequential or incidental damages, in which case the above waivers, limitations or exclusion may not apply to you.

**Money Back Guarantee**

Your LiteBox system is unconditionally guaranteed to perform to your satisfaction or your money will be refunded. Return your LiteBox to the seller (shipping charges prepaid) within ten (10) days of purchase, along with receipt or any proof of purchase for full refund.

**Warranty Registration Card**

Complete and return Warranty Registration Card within ten (10) days of purchase to register your warranty. Retain your receipt or any proof of purchase. Failure to return the Warranty Card and receipt or proof of purchase as required will invalidate the warranty and service coverages described herein.

**One Year Warranty**

Your LiteBox system, including battery, case, and chargers, but excluding lamp, is warranted for a period of one (1) year from the date of purchase. Should your LiteBox fail to operate, return it (shipping charges prepaid) to the factory or Authorized Service Center at the address listed with these instructions along with receipt or any proof of purchase. Streamlight will repair or replace the defective parts without cost and return the unit to you (shipping charges prepaid within the Continental USA), or at Streamlight's option, if permitted by law, Streamlight will refund your purchase price.

**Switch Warranty**

The switch of your LiteBox is guaranteed for life. In any country or jurisdiction where specific limitations are placed on lifetime warranties Streamlight will honor a 10-Year Limited Warranty. Should the switch fail to operate, return the LiteBox (shipping charges prepaid) to the factory or Authorized Service Center at the address listed with these instructions, along with your receipt or any proof of purchase. If you have owned your LiteBox for more than one (1) year include $5.00 for handling. Streamlight will repair or replace the switch without cost and return the unit to you (shipping charges prepaid within the Continental USA).

**Limitations on Warranty and Service Coverage**

1. Warranty is invalid if, in Streamlight's sole opinion, there has been tampering, alteration, abuse, misuse, or failure to follow proper care and maintenance procedures.
2. This warranty shall not extend to repairs by anyone other than Streamlight or other than service facilities designated by Streamlight.
3. This warranty is limited to the original user-purchaser as such appears on the Warranty Registration Card.

Should your Streamlight fail to operate, contact the closest Authorized Service Center or the factory directly at (610) 631-0600 or (800) 523-7488.

Serial #_____ Date of Purchase _____
This warranty gives you specific legal rights and you may also have other rights.

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